

**Bonneville Power Administration  
Fish and Wildlife Program FY99 Proposal**

**Section 1. General administrative information**

## **Protecting And Restoring The Squaw And Papoose Creek Watersheds**

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**Bonneville project number, if an ongoing project**     9607703

**Business name of agency, institution or organization requesting funding**  
Nez Perce Tribal Fisheries/Watershed Management Program

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**Business acronym (if appropriate)**     NPT

**Proposal contact person or principal investigator:**

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**Subcontractors.**

<b>Organization</b>	<b>Mailing Address</b>	<b>City, ST Zip</b>	<b>Contact Name</b>
Clearwater Nat'l Forest	Rt. 2 Box 191	Kamiah, ID 83536	Doug Gober
Earth Conservation Corps/Salmon Corps at Nez Perce	P.O. box 689	Lapwai, ID 83540	Heidi Stubbers

**NPPC Program Measure Number(s) which this project addresses.**

**SECTION 7.1 - ENSURING BIODIVERSITY; SECTION 7.6 - HABITAT GOALS, POLICIES, AND OBJECTIVES; SECTION 7.7 - COOPERATIVE HABITAT PROTECTION AND IMPROVEMENT WITH PRIVATE LANDOWNERS; SECTION 7.8 - IMPLEMENT STATE, FEDERAL, AND TRIBAL HABITAT IMPROVEMENTS.**

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**NMFS Biological Opinion Number(s) which this project addresses.**

THE CLEARWATER AND NEZ PERCE NATIONAL FOREST HAVE COMPLETED A BIOLOGICAL ASSESSMENT FOR ACTIVITIES AFFECTING STEELHEAD TROUT. THE NATIONAL MARINE FISHERIES SERVICE IS PRESENTLY PREPARING THE BIOLOGICAL OPINION, WHICH WILL BE COMPLETED IN JANUARY, 1998.

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**Other planning document references.**

BPA, 1997. Watershed Management Program: Final Environmental Impact Statement.

Clearwater National Forest and Nez Perce Tribe, 1997. Challenge Cost-Share Agreement between the Clearwater National Forest and the Nez Perce Tribe. Lapwai, ID.

Columbia Basin Fish and Wildlife Authority, 1997. Integrated Watershed Projects: The Process and Criteria for Selecting Watershed Projects for the Columbia Basin Fish and Wildlife Program.

Columbia River Fish and Wildlife Program, 1994. Columbia River Basin Fish and Wildlife Prog.

CRITFC, 1995. WY-KAN-USH-MI WA-KISH-WIT, Spirit of the Salmon. Vol. I and II Portland, OR.

Nez Perce Tribe and Idaho Dept. of Fish and Game, 1990. Clearwater River Subbasin Salmon and Steelhead Production Plan. Northwest Power Planning Council and CBFWA. Bosie, ID.

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**Subbasin.**

CLEARWATER SUBBASIN, Squaw and Papoose Creek Watersheds.

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**Short description.**

PROTECTING AND RESTORING THE SQUAW AND PAPOOSE CREEK WATERSHEDS IS THE OVERALL GOAL OF THIS PROJECT. WE WILL ACHIEVE THIS WORKING WITHIN AN OVERALL WATERSHED APPROACH, COMPLETING FOUR OBJECTIVES IN MANY AREAS OF THE WATERSHED.

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**Section 2. Key words**

Mark	Programmatic Categories	Mark	Activities	Mark	Project Types
X	Anadromous fish	X	Construction	X	Watershed

* Resident fish	O & M	Biodiversity/genetics
Wildlife	Production	Population dynamics
Oceans/estuaries	Research	* Ecosystems
Climate	* Monitoring/eval.	Flow/survival
Other	* Resource mgmt	Fish disease
	* Planning/admin.	Supplementation
	Enforcement	Wildlife habitat en-
	Acquisitions	hancement/restoration

**Other keywords.**

ROAD OBLITERATION, LANDSLIDE STABILIZATION

### Section 3. Relationships to other Bonneville projects

Project #	Project title/description	Nature of relationship
83350	NEZ PERCE TRIBAL HATCHERY	WATERSHED PROTECTION AND RESTORATION FOR ANADROMOUS AND RESIDENT FISH.
970600	NEZ PERCE TRIBE FOCUS WATERSHED PROGRAM	FOCUS PROGRAM IS CO-COORDINATED BETWEEN NM NPT AND STATE OF IDAHO.
9608600	IDAHO SOIL CONSERVATION COMMISSION FOCUS WATERSHED PROGRAM	FOCUS PROGRAM IS CO-COORDINATED BETWEEN NPT AND STATE OF IDAHO.
9809802	SALMON SUPPLEMENTATION IN IDAHO RIVERS.	WATERSHED PROTECTION AND RESTORATION FOR ANADROMOUS AND RESIDENT FISH.

### Section 4. Objectives, tasks and schedules

#### *Objectives and tasks*

Obj 1,2,3	Objective	Task a,b,c	Task
1	Alleviate Sediment Input from Road Sources in the Squaw and Papoose Creek Watersheds.	a	Coordinate with the Clearwater National Forest (CNF) on 12 miles of road to be obliterated.
		b	Obliterate roads.
		c	Revegetate obliterated roads with native plant species.
		d	Monitor and evaluate obliterated

			roads for blow-outs, vegetation growth, and soil stabilization.
		e	Complete report on effects of road obliteration on the affected watershed over time.
2	Abate potential for immediate sediment and delivery.	a	Coordinate with Clearwater National Forest on areas of deposited sediment within riparian areas that have the potential for adding sediment in the near term.
		b	Construct sediment fences, mulch and re-seed sediment areas to stabilize soils.
3	Stabilize existing landslides.	a	Coordinate with Clearwater National Forest on landslide areas needing stabilization
		b	Stabilize landslides by installing check dams, mulching and re-vegetating.
4	Operation and maintenance (O&M) of sediment fences, check dams, and the re-vegetation associated with them that was completed in previous years.	a	Observe and evaluate the sediment fences, check dams, and associated re-vegetation for any problems that will discourage them from accomplishing their original goals.
		b	Perform required work to enable sediment fences and check dams to accomplish their original goals.

***Objective schedules and costs***

<b>Objective #</b>	<b>Start Date mm/yyyy</b>	<b>End Date mm/yyyy</b>	<b>Cost %</b>
1	7/1999	11/1999	85.00%
2	7/1999	7/1999	5.00%

3	7/1999	7/1999	5.00%
4	8/1999	8/1999	5.00%
			TOTAL 100.00%

#### **Schedule constraints.**

EXISTING SCHEDULES FOR THE 1999 BUDGET YEAR MAY CHANGE DUE TO WEATHER CONDITIONS. ALL ON-THE-GROUND PROJECTS OCCUR IN MOUNTAINOUS AREAS AT ELEVATIONS UP TO 5500 FEET ABOVE SEA LEVEL, WHERE UNPREDICTABLE WEATHER PATTERNS MAY OCCUR.

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#### **Completion date.**

A FIVE YEAR PLAN IS TO BE COORDINATED AND DEVELOPED STARTING 1999 THROUGH 2003 FOR THE SQUAW AND PAPOOSE CREEK WATERSHEDS WITH THE CLEARWATER NAT'L FOREST. MONITORING, EVALUATION, AND OPERATION WILL CONTINUE BEYOND 2003.

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## **Section 5. Budget**

### ***FY99 budget by line item***

<b>Item</b>	<b>Note</b>	<b>FY99</b>
Personnel		\$58,525
Fringe benefits		\$8,546
Supplies, materials, non-expendable property		\$1,263
Operations & maintenance	COSTS ABSORBED IN REST OF TABLE.	
Capital acquisitions or improvements (e.g. land, buildings, major equip.)		
PIT tags	# of tags:	
Travel		\$23,176
Indirect costs		\$29,398
Subcontracts		\$111,616
Other	VEHICLE COSTS.	\$9,169
<b>TOTAL</b>		<b>\$241,693</b>

### ***Outyear costs***

<b>Outyear costs</b>	<b>FY2000</b>	<b>FY01</b>	<b>FY02</b>	<b>FY03</b>
Total budget	\$265,862	\$39,879	\$43,867	\$48,254
O&M as % of total	15.00%	99.99%	99.99%	99.99%

## **Section 6. Abstract**

Protecting and restoring the Squaw and Papoose Creek Watersheds to assist in increasing anadromous fish populations is the overall goal of this project. We will achieve this working within an overall watershed approach, completing four objectives in many areas of the watersheds. The first objective is road obliteration, which is a priority activity within the watersheds to reduce sediment delivery into streams. Monitoring and evaluation (M&E) will be completed and a report produced researching how road obliteration has decreased sediment loads into the streams over time. The second objective is abating the potential for immediate sediment delivery into streams from identified areas of deposited sediment within riparian areas. Stabilizing landslides is the third objective to reduce potential for contributing sediment. The fourth objective in the proposal is operation & maintenance (O&M) of structures constructed in previous years in the effort to reduce sediment into streams. These structures include check dams, sediment fences, and the re-vegetation associated with them. The expected outcome of our work will decrease sediment loads into streams and tributaries within the watersheds, which will in turn increase available fish and wildlife habitat, assist in enlarging their populations, and protect Nez Perce tribal treaties and culture.

## **Section 7. Project description**

### **a. Technical and/or scientific background.**

Protecting and restoring the Squaw and Papoose Creek Watersheds, so they can return to their original state producing a healthy environment for fish and wildlife, using an overall watershed approach (as outlined in the NPPC Fish and Wildlife Program and the Anadromous Fish Restoration Plan of the Tribes), and protecting Nez Perce Tribal treaty rights and culture are the main goals of this project.

During late November and early December 1995, Powell Ranger District experienced rainfall that exceeded the thirty year average monthly totals for November by 314 percent. Also during November and December, stream flows in Squaw and Papoose Creeks exceeded monthly means from 380 percent to 460 percent. Cumulative precipitation at Powell was 15.5 inches from October through November 26, when mass failures, debris torrents, and landslides began occurring on numerous forest roads, State Highway 12, and jammer roads built for timber harvest (NPT, 1996). The problems in the watersheds are presently continuing and show great potential for further mass sediment delivery into crucial anadromous and resident fish spawning and rearing habitat.

A field survey during the summer of 1996 identified and quantified 41 mass failures in Squaw Creek, and 76 in the Papoose Creek watershed. The survey showed that 44 percent of failures in Squaw were harvested-related, 51 percent were

road related, and 5 percent were natural. In Papoose 18 percent were harvested related, 74 percent road related, 7 percent natural, and 1 percent caused by bank erosion (NPT, 1996).

The problem exists from Clearwater National Forest roads, jammer roads built for timber harvest, and natural sources which have experienced numerous landslides and debris torrents. There are approximately 105 miles of those roads in the Squaw Creek Watershed and 111.5 in the Papoose Creek Watershed. As a result, bedload and sediment deposition has negatively impacted spawning and rearing habitat for salmon, steelhead, bull trout, and cutthroat trout (CRITFC, 1995) and increased cobble embeddedness within the watershed (Fuller, Johnson, and Bear, 1984), (King, 1993), (USFS and USBLM, 1997). Most in-stream habitat projects will not restore existing and future habitat unless the sources of sediment are evicted.

All of the four objectives our project proposes strive towards meeting all of the goals and objectives found in the Wy-Kan-Ush-Mi Wa-Kish-Wit (CRITFC, 1995), as stated below:

### **ANADROMOUS FISH RESTORATION PLAN OF THE TRIBES**

#### **GOALS**

- Restore anadromous fishes to the rivers and streams that support the historical culture and economic practices of the tribes.
- Emphasize strategies that rely on natural production and healthy river systems to achieve this goal.
- Protect tribal sovereignty and treaty rights.
- Reclaim the anadromous fish resources and the environment on which it depends for future generations.

Putting fish back into river and stream systems alone is not enough to restore their populations, they need a healthy system to return, spawn, and rear in. Our proposal objectives will mitigate (in place, in kind) the problems stated above by decreasing sediment into rivers and streams, which will allow the stream environment to heal and return to their original capacity for spawning and rearing habitat.

The project proposal also protects the goal of tribal sovereignty and treaty rights. In the Treaty of 1855, the Nez Perce Tribe ceded much of their aboriginal territory to the United States in exchange for a reservation that was to serve as a permanent homeland. In that treaty, the Nez Perce Tribe reserved certain rights including, “the exclusive right of taking fish in all the streams running through or bordering said reservations is further secured to said Indians (Nez Perce Treaty, 1855).” According to this, the federal government’s has a trust agreement to protect all tribal resources. The proposal will work toward protecting our resources, therefore fulfilling the government’s responsibilities. The project will also allow the tribe to manage our own tribal resources, which will in turn protect our sovereignty and treaty rights. This is called for in the *National Indian Forest Resource*

*Management Act (PL 101-630)*, which provides for the management of forested tribal trust lands (USDA, 1997).

## **ANADROMOUS FISH RESTORATION PLAN OF THE TRIBES**

### **OBJECTIVES**

- Within 7 years, halt the declining trends in salmon, sturgeon, and lamprey populations originating upstream of Bonneville Dam.
- Within 25 years, increase the total adult salmon returns of stocking originating above Bonneville Dam to 4 million annually and in a manner that sustains natural production to support tribal commercial as well as ceremonial and subsistence harvests.
- Within 25 years, increase sturgeon and lamprey populations to naturally sustainable levels that also support tribal harvest abundance in perpetuity.

The results of decreased sedimentation to water quality and the benefits towards fish habitat will be stated in a report following the 1998 road obliteration season, which is explained in this section, part (b), under objective 1.

In the 1997 season, the Nez Perce Tribal Fisheries/Watershed Program, in conjunction with the Clearwater National Forest and Earth Conservation Corps, (Nez Perce Salmon Corps.), obliterated a total of 9.0 miles of forest and jammer roads within Squaw and Papoose Creek Watersheds. It is planned in the 1998 season (pending BPA approval) to obliterate 10.0 miles of road and stabilize as many landslides and sediment accumulation areas within the riparian corridor as possible during the season that resources will allow. Rudy Carter (technician III) served as a crew leader for road obliteration and will continue in the future. Emmitt E. Taylor Jr. (civil engr., EIT) began training to become a field road obliteration inspector for the 1998 and 1999 seasons and an additional employee (to be announced) may also be trained. Ira Jones (program coordinator) has coordinated all activities within the Squaw and Papoose Watersheds for the 1997 season and will co-coordinate the 1998 and 1999 seasons with Janet Hohle of the Idaho Soil Conservation Commission.

#### **b. Proposal objectives.**

**OBJECTIVE 1:** Alleviate Sediment Input from Road Sources within the Squaw and Papoose Creek Watersheds.

**Product:** Twelve miles of forest system roads and jammer roads constructed for timber harvest obliterated, returning the terrain as closely as possible to its original hydrologic state removing the high risk of blow-outs and concentrated surface water flow. A monitoring and evaluation report will be produced including but not limited to; history of road obliteration in the Squaw and Papoose Creek Watersheds; future obliteration and; analysis of sediment loads, cobble embeddedness, and overall water quality in streams versus the amount of road obliterated over time. This report will evaluate and analyze an overall measure of

success. It will also determine what data collection is available by all involved agencies and what is needed in the future for a complete monitoring system.

**OBJECTIVE 2:** Abate potential for immediate sediment delivery into streams and tributaries.

**Product:** Identified sediment accumulation areas within the riparian corridors of the two watersheds stabilized through construction of sediment fences, mulching, and re-vegetation.

**OBJECTIVE 3:** Stabilizing existing landslides that may increase sediment loads into streams and tributaries.

**Products:** Identified landslide areas within the two watersheds stabilized by check dams, mulching, and re-vegetation.

**OBJECTIVE 4:** O&M of sediment fences, check dams, and the re-vegetation associated with them that was completed in previous years.

**Products:** Any problems identified with previous projects repaired or enhanced to enable them to achieve their original goals of decreasing sediment into streams and tributaries.

c. **Rationale and significance to Regional Programs.**

Protecting and restoring the Squaw and Papoose Creek Watersheds is called for in the objectives and goals of the Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Springs, and Yakama Tribes (Volume I) as stated above in Section 7, Part (a) of this proposal. All four of the project objectives propose to serve an overall watershed plan to restore and protect the Squaw and Papoose Creek Watersheds, therefore, increasing anadromous and resident fish and wildlife habitat, assisting in enlarging their populations, and in turn, protecting Nez Perce Tribal treaty rights and culture.

A written agreement has been established with the Clearwater National Forest to work together with the *Nez Perce Tribal Fisheries/Watershed Program* in performing the four objectives proposed for the Squaw and Papoose Creek Watersheds in 1999. This agreement is a Challenge Cost-Share Agreement between the Clearwater National Forest and the Nez Perce Tribe and has been used for all the work that has been done in 1997 (CNF and NPT, 1997), and is in the process of being extended through the year 2003 (5-year plan). A verbal agreement has already been made between the two parties concerning this matter, with a memorandum of agreement (MOA) to be established in February of 1998. This agreement discusses the relationship between the two governments with regard to watershed management within the Squaw and Papoose Creek Watersheds, as well as the entire Clearwater National Forest. Verbal agreement has been made with the Earth Conservation Corps., for help in completing the proposed objectives for 1999.

Using the challenge cost-share agreement between the two parties in 1997, 9.0 miles of road within the Squaw and Papoose Creek watersheds were obliterated. It

is planned for the 1998 season (pending BPA approval) to obliterate 10.0 miles of roads and 12.0 in 1999 within the watersheds. According to the agreement, the Clearwater National Forest is to analyze and identify priority roads to be obliterated. In the same agreement, the tribe will provide funding to cover the onsite contract administration and inspection, contractor and their equipment costs, and purchase of erosion control supplies (NF and NPT, 1997). In the 1997 season, the Nez Perce Tribal Watershed Program provided a 6 member field crew. It is planned for the 6 member field crew to continue in the future and for the forest service to train Emmitt E. Taylor Jr. (Civil Eng., EIT) and another employee of the *Nez Perce Tribal Fisheries/ Watershed Program* as road obliteration field inspectors in the 1998 and 1999 seasons. A report is also to be completed by Emmitt E. Taylor in conjunction with the Clearwater National Forest analyzing how road obliteration has impacted stream and water quality over time in the Squaw and Papoose Creek Watersheds. A verbal agreement has been made between both parties concerning this issue.

This proposed project will directly help fisheries projects already funded by BPA. BPA has allotted \$1,500,000 to the Nez Perce Fisheries Program for the 1998 year to be used towards the Nez Perce Tribal Hatchery (NPTH). The NPTH will incubate and rear fish in their facility and then release them into the natural environment to continue their freshwater rearing in their natural streams for another 6 months to 1 year prior to smolting. Squaw and Papoose Creeks are important spring chinook production “treatment” streams for NPTH. In order for the production program to achieve success, habitat conditions in the stream need to be as beneficial as possible. The objectives of this proposal will work to benefit fish and wildlife habitat for the Nez Perce Tribal Hatchery projects.

Approximately \$233,000 has also been appropriated to the Nez Perce Tribal Fisheries Program by BPA, Project Number #8909802, for Salmon Supplementation in Idaho Rivers. Idaho Salmon Supplementation Studies is a cooperative research project of the IDFG, the NPT, Shoshone-Bannock Tribes, and the U.S. Fish and Wildlife Service to test supplementation on an experimental basis. BPA funds the program through five projects, one which is the NPT portion described in the Project Number above. As in NPTH, this supplementation program requires beneficial habitat conditions in order to be effective. This watershed project focuses on habitat improvement efforts in two of the supplementation streams, Squaw and Papoose Creeks. Although both of these streams offer important habitat for spring chinook, as well as steelhead and bull trout, both were severely impacted in the floods during the winter of 1995 and are still continuing presently. Restoration work targets alleviating the potential for further habitat degradation in these supplementation streams by preventing road derived damage.

The project will work towards 7.6 Habitat Objective of the NPPC *Fish and Wildlife Program* (NPPC, 1994) to limit the percent of fine sediment in salmon and steelhead redds to no more than 20 percent and limit cobble embeddedness to less than 30 percent or documented historic condition. This objective will also work towards the overall goals and objectives of the Anadromous Fish Restoration Plan

of the Tribes (CRITFC, 1995) in returning salmon back to the rivers and streams above Bonneville Dam and restoring healthy river systems.

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d. **Project history**

The *Nez Perce Tribal Fisheries/Watershed Program* has been involved in road obliteration and soil and landslide stabilization within the Squaw and Papoose Creek Watersheds since 1997, under BPA contract number 96-077-00. A Challenge Cost-Share Agreement between the Clearwater National Forest and the Nez Perce Tribe (CNF and NPT, 1997) was produced, signed by both parties, and used during the 1997 year to obliterate and revegetate 9.0 miles of road. This same agreement will be used to obliterate 10.0 miles of roads and stabilize as many landslides and potential sediment input areas within the riparian corridor as resources will allow for the 1998 season (pending BPA approval). Approximately 0.5 miles of sediment build up from road reconstruction was also re-vegetated. Our cost associated with the two watersheds for the 1997 season totaled approximately \$98,000 and is projected to be \$109,328 for the 1998 season.

e. **Methods.**

**METHODOLOGY - OBJECTIVE 1**

Objective 1 and the related tasks, as stated in section four of this proposal, will be achieved by obliterating excess forest service roads and jammer roads constructed for timber harvest in the Squaw and Papoose Creek Watersheds, and will be done in cooperation with the Clearwater National Forest. The primary objective for road obliteration in the Lolo Creek Watershed is to reduce watershed degradation by reclaiming roads that are no longer a necessary part of the forest's transportation system. The scope and general methods are given below:

**SCOPE:**

- Obliterate and re-vegetate approximately 12.0 miles of roads within the Squaw and Papoose Creek Watersheds.

**METHODS:**

- Removing culverts and other drainage structures that require maintenance.
- Opening stream channels by laying back side slopes as much as feasible.
- Flattening fill slopes or pulling up fill where failures exist or are impending or where poorly vegetated.
- Flattening or pulling down cut slopes where they are too steep or poorly vegetated.
- Out-sloping the road surface and/or constructing water bars across to avoid concentrating runoff.
- Laying selected portions of the road back to its original contours where the road is poorly vegetated or unstable.
- Re-vegetating with native species.

- Monitor and evaluate obliterated roads for soil stabilization, blow-outs, and vegetation re-growth.
- Complete analysis report and distribute to all involved or interested parties.

A report will be produced studying and analyzing all data within the Squaw and Papoose Creek Watersheds concerning road obliteration including, but not limited to; history of road obliteration in the Squaw and Papoose Creek Watersheds; number, name, and location of roads obliterated; future obliteration; analysis of sediment loads, cobble embeddedness, and overall water quality in streams versus the amount of roads obliterated over time. This report will produce an overall measure of success. It will also determine what data collection is available by all involved agencies and what is needed in the future for a complete monitoring system.

A requirement concerning the methodology of road obliteration involves re-vegetation. All plant shrub and tree species will be native to the surrounding area.

As required under the Challenge Cost-Agreement (CNF and NPT, 1997), the Clearwater National Forest analyzed the Squaw and Papoose Creek Watersheds for road obliteration needs. Up to date, 9.0 miles have been obliterated in 1997 by the Forest and the *Nez Perce Tribal Fisheries/Watershed Program*. With time constraints and money available between the two agencies on other projects, approximately 10.0 miles of road have been planned for obliteration in the Squaw and Papoose Creek Watersheds for 1998 (pending BPA approval) and 12.0 for the 1999 season.

Monitoring and evaluation of the obliterated roads will continue for 5 years after completion. The obliterated roads will be monitored and evaluated for blow-outs, soil stabilization, and re-vegetation growth. The water quality data collected on the streams impacted by sedimentation will also be monitored and evaluated. Monitoring and evaluation results will be presented in a final report to be completed by Emmitt E. Taylor Jr. (Civil Engr., EIT) of the *Nez Perce Tribal Fisheries/Watershed Program* at the end of the 1999 road obliteration season. A report will also be completed at the end of every year in which monitoring and evaluation occurs.

## **METHODOLOGY - OBJECTIVE 2**

As stated in Section 4, this objective will be performed by completing these tasks as follows; (a) coordinate with CNF on areas of deposited sediment within riparian areas that have a potential for adding sediment in the near term, and (b) construct sediment fences, mulch and re-vegetate to stabilize soils.

After the potential areas have been located, a sediment fences will be constructed preventing sediment to enter streams or tributaries. The sediment fences will be constructed using CNF methods and specifications. Two common materials used for the fence are black cloth and hay bails. Mulch will be placed in strategic areas of the site to abate sediment delivery to the stream in the short term. Vegetation will then be planted (type and number varies by area) to further stabilize soils, control erosion, and aid in absorbing snow melt and rainfall.

### **METHODOLOGY - OBJECTIVE 3**

Stabilizing existing landslides will be performed by; (a) coordinating with CNF on landslides areas needing stabilization, and (b) stabilizing landslides by installing check dams, mulching, and re-vegetating with native plant species. After areas have been identified, check dams will be constructed by methods, materials, and specifications, approved by both parties. Types and methods for building check dams varies by type of terrain and location. One common method is using logs in a gully that has a landslide in it. The logs are placed perpendicular to the landslide and bored a distance one-third the total exposed length into the hillside. The size and length of the log would be determined by the size of the landslides and the surrounding landscape features. The log is backfilled with native material. This procedures stops the landslide from depositing sediment into streams and tributaries and decreases the slope of the hillside which it is traversing.

### **METHODOLOGY - OBJECTIVE 4**

Objective four and the related tasks are listed in section four of this project proposal. The sediment stopping structures, including check dams, sediment fences, and the re-vegetation associated with them (as constructed in previous years) will be observed and evaluated for needed repairs or enhancement that is required to enable them in attaining their original goals of decreasing sediment loads into streams. There are expected losses of seedlings and clipping due to browsing by domestic and wild animals. Any work needed as determined will be completed by our program in conjunction with the Clearwater National Forest.

The results expected from the proposed project will be protecting and restoring the Squaw and Papoose Creek Watersheds, so they may return to their original states producing a healthy environment for fish and wildlife, assisting in enlarging their populations, and in turn protecting Nez Perce tribal treaties and culture using an overall watershed approach. The direct results of this work, over time, for the watershed will be healthy streams for anadromous and resident fish spawning and rearing habitat and assistance to in-stream structures that will not work without decreased sediment loads. This will in turn result in protection of our Nez Perce tribal culture, sovereignty environment, and 1855 treaty rights.

#### **f. Facilities and equipment.**

- **EQUIPMENT: Excavator and/or Bulldozer**  
**NUMBER: 1 of each.**  
**TO BE PURCHASED, RENTED, OR OWNED: Rented**  
**USE: The excavator and/or bulldozer will be used to return determined roads to their original contours, remove existing culverts and scarify the ground for re-vegetation. The bulldozer will also be used to transport logs in the construction of check dams.**
- **EQUIPMENT: Hoe-dads**  
**NUMBER: 6**  
**TO BE PURCHASED, RENTED, OR OWNED: Purchased**

- USE: Hoe-dads will be used for planting trees.
- **EQUIPMENT: Gloves**  
**NUMBER: 20 pairs**  
**TO BE PURCHASED, RENTED, OR OWNED: Purchased**  
**USE: Gloves will be used as necessary for protection of hands.**
- **EQUIPMENT: GSA Vehicles**  
**NUMBER: 3 (1-Ford Expedition, 1-Ford F-150, 1-Chevy 1-Ton, trucks)**  
**TO BE PURCHASED, RENTED, OR OWNED: Owned**  
**USE: The GSA Vehicles will be used to transport employees, equipment, materials, and ATV.**
- **EQUIPMENT: ATV**  
**NUMBER: 1**  
**TO BE PURCHASED, RENTED, OR OWNED: Owned**  
**USE: The ATV will be used to transport equipment and materials to the work site.**
- **EQUIPMENT: Office Computer**  
**NUMBER: 1**  
**TO BE PURCHASED, RENTED, OR OWNED: Owned**  
**USE: The computer will be used to analyze and write the report on the success of road obliteration over time.**
- **EQUIPMENT: Chain saw**  
**NUMBER: 1**  
**TO BE PURCHASED, RENTED, OR OWNED: Owned**  
**USE: To cut logs for check dams**
- **EQUIPMENT: Shovels**  
**NUMBER: 6**  
**TO BE PURCHASED, RENTED, OR OWNED: Owned**  
**USE: To excavate soil for check dams**

**g. References.**

**REFERENCES**

**CNF and NPT (Clearwater National Forest and Nez Perce Tribe). 1997. Challenge Cost-Share Agreement between the Clearwater National Forest and the Nez Perce Tribe. Lapwai, Idaho.**

**CRITFC (Columbia River Inter-Tribal Fish Commission). 1995. WY-KAN-USH-MI WA-KISH-WIT, Spirit of the Salmon, The Columbia River Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Springs, and Yakama Tribes. Volume I. Portland, Oregon.**

**EPA (Environmental Protection Agency). 1993. Monitoring Protocols to Evaluate Water Quality Effects of Grazing Management on Western Rangeland Streams.**

**EPA (Environmental Protection Agency). 1997. Idaho TMDL development schedule: EPA review and evaluation.**

**Fuller, R., Kucera, P., and Johnson, Dr. 1995. A Biologist and Physical Inventory of Streams Within the Nez Perce Reservation.**

**Fuller, Johnson, and Bear. 1984. A biological and physical inventory of the streams within the lower Clearwater River Basin, Idaho. Nez Perce Tribal Fisheries.**

**Jim Brown Creek Resource Mgt. Cooperative. 1997. Jim Brown Creek Coordinated Resource Management Plan. Clearwater County, Idaho.**

**Nez Perce Treaty of 1855 with the United States Federal Government.**

**NPT (Nez Perce Tribe). 1996. Clearwater River Basin Fish Habitat Improvement, Papoose Creek Watershed.**

**NPT (Nez Perce Tribe). 1996. Clearwater River Basin Fish Habitat Improvement, Squaw Creek Watershed.**

**NPT and IDFG (Nez Perce Tribe and Idaho Department of Fish and Game). 1990. Clearwater River Sub-basin: Salmon and Steelhead Production Plan.**

**NMFS (National Marine Fisheries Service). 1997. Salmon Recovery Plan for the Snake River.**

**NPPC (Northwest Power Planning Council). 1994. Columbia River Basin Fish and Wildlife Program.**

**USDA (United States Department of Agriculture). 1997. National Indian Forest Resource Management Act, Public Law 101-630.**

## **Section 8. Relationships to other projects**

Several agreements (written and verbal) have been made between various agencies and individuals to work together with the *Nez Perce Tribal Watershed Management Program* in performing the four objectives proposed for the Squaw and Papoose Creek Watersheds in 1999. The staff and program manager, Ira Jones, constantly seek agreements and/or cooperation between other agencies for work to be completed with the Clearwater Sub-basin.

Currently, the Nez Perce Tribe is working under a Challenge Cost Share Agreement with the Clearwater National Forest. This agreement will be amended to continue through the year 2003 (5-year plan). It discusses the relationship

between the two governments with regard to watershed management with the Squaw and Papoose Creek Watersheds and the Clearwater National Forest.

According to the Nez Perce Treaty of 1855 with the Federal Government, the government has a trust agreement to protect all tribal resources. This proposal will work towards protecting our resources, therefore fulfilling the federal government trust responsibilities. This project will also allow the tribe to manage our own tribal resources, which will in turn protect our sovereignty and treaty rights.

This project will directly help fisheries projects already funded by BPA. BPA has allotted \$1,500,000 to the Nez Perce Tribal Hatchery (NPTH). The NPTH will incubate and early rear fish in their facility and then release them into the natural environment to continue their freshwater rearing, two of which are Squaw and Papoose Creeks. These creeks are important spring chinook production “treatment” streams for NPTH. In order for their program to achieve success, habitat conditions in the stream need to offer as beneficial conditions as possible. The objectives of this proposal will work to benefit fish and wildlife habitat for the Nez Perce Tribal Hatchery projects.

Approximately \$233,000 has also been appropriated to the Nez Perce Tribal Fisheries Program by BPA, Project Number #8909802, for Salmon Supplementation in Idaho Rivers. Idaho Salmon Supplementation Studies is a cooperative research project of the IDFG, the NPT, the Shoshone-Bannock Tribes, and the U.S. Fish and Wildlife Service to test supplementation on an experimental basis. BPA funds the program through five projects, one which is the NPT portion described in the Project Number above. As in NPTH, this supplementation program requires beneficial habitat conditions in order to be effective. This watershed project focuses on habitat improvement efforts in two of the supplementation streams, Squaw and Papoose Creeks. Although both of these streams offer important habitat for spring chinook, as well as steelhead and bull trout, both were severely impacted in the floods during winter 1995 and is presently continuing today. Restoration work targets alleviating the potential for further habitat degradation in these supplementation streams.

The Clearwater Focus Watershed Program is co-coordinated by Ira Jones of the *Nez Perce Tribal Fisheries/Watershed Management Program* and Janet Hohle of the *Idaho Soil Conservation Commission*. They will work directly with this project by coordinating multiple jurisdictions, multiple agencies, and multiple private landowners of this projects area, in efforts to protect and restore anadromous fisheries habitat within the Squaw and Papoose Creek Watersheds. The two co-coordinators are funded by BPA.

## Section 9. Key personnel

**NAME:** Ira Jones

**TITLE:** \* Clearwater Sub-basin Focus Coordinator (1 FTE)

\* Habitat/Watershed Manager, Nez Perce Tribe

**FTE/HOURS:** 1.0

**EDUCATION:**

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INSTITUTION	LOCATION	ATTENDANCE	MAJOR	DEGREES
University of Montana	Missoula, MT	Sept. 73 - June 74	Wildlife	N/A

**CERTIFICATION:** N/A

**PROFESSIONAL ORGANIZATIONS:** N/A

**PREVIOUS EMPLOYMENT:**

March 3, 1997 to present, Clearwater Sub-basin Focus Program Coordinator for the Nez Perce Tribe, Lapwai, Idaho. **Duties:** Analyze programs, laws, policies related to watershed management. Facilitate development of criteria to identify critical fisheries habitat. Develop system to apply criteria to watershed for project development and administration. Prepare plan documents for watershed habitat work coordination. Give educational presentations and workshops for watershed management and proposal development. Provide assistance to project proponents with proposal development, implementation, monitoring, and assessment.

May of 1996 to present, Habitat/Watershed Manager of the Nez Perce Tribe. Responsible for planning and implementation of the Early Action Watershed Projects for the Nez Perce Tribe.

6/25/1986 - 3/1/97, Tribal Government Program Manager, United States Forest Service, Region One.

12/14/80 - 6/25/86, Facilities Manager, United States Forest Service, Region One.

7/74 - 10/79, Fire Cache Work Leader, USDA Forest Service, Region One.

**RELEVANT JOB COMPLETIONS:** 1) Coordinated National, Multi-Regional, and Regional Civil Rights conferences. 2) Facilitated Treaty Rights workshops with host tribes and multi-government agencies. 3) Organized and conducted Tribal Relations Training primarily for management level from the U.S. Forest Service, Tribes, Bureau of Land Management, and the Bureau of Indian Affairs. 4) Introduced, implemented, and managed the Inter-Tribal Youth Practicums for careers in natural resources and leadership within the U.S. Forest Service Regions 1, 5, 9, and 10. 5) Developed an Intergovernmental Personnel Act (IPA) position to work with the Salish Kootnai college to teach environmental science courses and develop a four-year natural science curriculum at the college. This three-year position and the program developed into a four-year accredited degree program in the fall of 1996.

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**NAME:** Felix M. McGowan

**TITLE:** Habitat Biologist

**FTE/HOURS:** 1.0

**DUTIES OF PROJECT:** Co-coordinator for all projects, riparian re-vegetation supervisor, fence placement coordinator and liaison between Forest Service and Tribal work crews.

**QUALIFICATIONS:** Felix M. McGowan has a degree in Biology from Gonzaga University. He has worked for the Nez Perce Tribe for one year. Prior to coming to this job he worked in a college setting at North Idaho College.

**DEGREE:** Bachelors of Arts in Biology, Gonzaga University

**CURRENT RESPONSIBILITIES:** Determine budget and staffing needs, prepare project work plans and coordination of projects, work with interdisciplinary teams, help to develop land management plans, coordinate fish, wildlife and cultural habitat requirements, investigate potential projects, and help inventory and evaluate habitat conditions.

**PREVIOUS EMPLOYMENT:**

1997 - Present: Nez Perce Tribe

1997 - 1994: North Idaho College

1994 - 1988: McGowan Farms

**EXPERTISE:** Felix has a good base in the natural sciences. His work focuses on protection and restoration of riparian and cultural sites. These two areas require a knowledge of a variety of habitat types and how the different habitats interrelate with one another.

**PUBLICATIONS OR JOBS COMPLETED:** 1)Squaw Creek Road Obliteration, 2) Squaw Creek Stream Survey, 3)McComas Meadows Fencing Project, 4) Musselshell Meadows Fencing Project, 5)Johnson Creek/Cox Ranch Rehabilitation Review.

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**NAME:** Emmit E. Taylor Jr.

**TITLE:** Civil Engineer-In-Training

**FTE:** 1.0

**DUTIES ON PROJECT:** Road obliteration field inspector; Assist in analyzing, designing, and construction of bank stabilization structures. Co-coordinator for all watershed projects.

**QUALIFICATIONS:** Emmit E. Taylor Jr. has a B.S. degree in Civil Engineering from Colorado State University. He has worked in several professional firms including, but not limited to, Colorado State University Transportation Program, Womer & Associates Engineering and Architecture Firm, and the Nez Perce Tribe.

**DEGREE:** Bachelors of Science in Civil Engineering - Colorado State University

**CERTIFICATION STATUS:** Civil Engineer-In-Training

**CURRENT EMPLOYER:** Nez Perce Tribal Fisheries/Watershed Management Program

**CURRENT RESPONSIBILITIES:** Assist in gathering, analyzing, and interpreting watershed data; represent program in various interdisciplinary teams; assist in surveying project areas; aid in assessing water resources/quality; knowledge of current computer software programs; design of civil engineering projects; supervise and field inspection of road obliteration; co-coordinate program projects.

#### **PREVIOUS EMPLOYMENT:**

**1997 - Present: Nez Perce Tribal Fisheries/Watershed Program**

**1997 - 1995: Womer and Associates Engineering and Architecture Firm**

**1995 - 1993: Colorado State University Tribal Transportation Program**

**EXPERTISE:** Emmitt E. Taylor Jr.'s background is in Civil Engineering with an emphasis in hydrology. Mr. Taylor's analysis, design, and construction work concentrates on stream rehabilitation, stream morphology, water quality, road obliteration, in-stream structures, and fish passage improvements.

**PUBLICATION OR JOB COMPLETIONS:** (1) Eldorado Fall Area Survey, (2) McComas Meadows Meadow Protection Project, (3) Squaw Creek Stream Survey and Analysis, (4) Colville Confederated Tribes HRD Building Site Development Design, and (5) Geiger Boulevard Environmental Analysis.

### **Section 10. Information/technology transfer**

The forest service has a required obligation to provide research, transfer of technology, and technical assistance to Indian tribal governments (USDA, 1997). This obligation by the forest service will be used by the *Nez Perce Tribal Fisheries/Watershed Program* to aide in accomplishing the goals and objectives of our Program, NPPC Fish and Wildlife Program, and Spirit of the Salmon Anadromous Fish Restoration Plan of the Tribes. A relationship with the Clearwater National Forest has been established and has had a very positive impact on both organizations and is expected to continue in the future. This relationship has lead to several agreements, both verbal and written, for the completion of numerous projects within the Clearwater Sub-basin.

A verbal agreement (to be included in a memorandum of understanding at a later date) has been made with the Clearwater National Forest to assist Emmitt E. Taylor Jr. (Civil Engr., EIT) in obtaining his professional engineering license. The forest service engineers will oversee Mr. Taylor's designs and the implementation of these designs. During the next 3 years he will seek qualifications to take the State of Idaho Professional Engineer License Exam.

A report will be produced studying and analyzing all data within the Squaw and Papoose Creek Watersheds concerning road obliteration, and will include, but not be limited to; history of road obliteration in the Watersheds; number, name, and location of road obliterated; future obliteration; analysis of sediment loads, cobble embeddedness, and overall water quality in streams versus percent of road obliterated over time. This report will produce the overall measure of road obliteration success and determine what is needed in the future for a complete monitoring system. This report will be completed in coordination with the Clearwater National Forest and distributed to all parties involved or interested.

Quarterly reports will be assembled stating, but not limited to, project status, time lines, dollars spent, and problems that need to be addressed during the coming quarter. The end of the year report will compile all data from the quarterly reports determining accomplishments achieved during the previous work season and what

**information, both negative and positive, can be applied to the upcoming season. These reports will also be distributed to all parties involved and interested.**